AMENDMENTS TO THE CLAIMS

1. (Original) A probe for binding a plurality of targets comprising an allosteric regulator linked to at least one regulated aptamer wherein binding the allosteric regulator with a first target enhances the binding of the at least one regulated aptamer to at least one second target.

2. (Withdrawn) A probe for binding a plurality of targets comprising an allosteric regulator linked to at least one regulated aptamer wherein binding the allosteric regulator with a first target inhibits the binding of the at least one regulated aptamer to at least one second target.

3. (Original) The probe of claim 1, wherein the allosteric regulator and the at least one regulated aptamer are linked in a cis configuration.

4. (Original) The probe of claim 1, wherein the binding of the allosteric regulator for the first target has a first affinity and the binding of the at least one regulated aptamer for the at least one second target has a second affinity, and the first affinity is greater than the second affinity.

5. (Original) The probe of claim 1, wherein the allosteric regulator comprises a tobramycin aptamer and the at least one regulated aptamer comprises an ATP aptamer.

6. (Original) The probe of claim 1, wherein the allosteric regulator is a nucleic acid molecule.

7. (Original) The probe of claim 6, wherein the nucleic acid molecule is selected from the group consisting of an antisense molecule and an aptamer.

8. (Original) The probe of claim 7, wherein the aptamer is capable of binding targets selected from the group consisting of bitheophylline, FMN, AMP, arginine, citrulline, tobramycin, ATP, and neomycin B.

9. (Original) The probe of claim 1, wherein the first target is selected from the group consisting of prostate specific antigen, prodrug, a tumor cell, receptor, carbohydrate, lipopolysaccharide, and oligosaccharide.

10. (Original) The probe of claim 9, wherein the at least one second target is selected from group consisting of prostate specific antigen, a drug, a prodrug, a tumor cell, receptor, carbohydrate, lipopolysaccharide, and oligosaccharide.

11. (Original) The probe of claim 9, wherein the prodrug is selected from the group consisting of CPI-0004Na and L-377202.

12. (Original) The probe of claim 10, wherein the prodrug is a peptide-based prodrug.

13. (Original) The probe of claim 1, where the prodrug is selected from the group consisting of CPI-0004Na and L-377202.

14. (Original) The probe of claim 10, where the prodrug is a peptide-based prodrug.

15. (Original) The probe of claim 10, where the oligosaccharide is an O-specific oligosaccharide.

16. (Original) The probe of claim 15, wherein the O-specific oligosaccharide is selected from the group consisting of the O58 and O124 polysaccharides of *E. coli*.

17. (Original) The probe of claim 1, wherein the at least a second target is an imaging agent selected from the group consisting of a fluorescent molecule and a radioactive molecule.

18. (Original) The probe of claim 1, wherein the at least one second target is a toxic agent.

19. (Withdrawn) A method of detecting a plurality of targets comprising, providing an allosteric probe containing an allosteric regulator linked to at least one regulated aptamer, contacting the probe with a first target, wherein the binding of the allosteric regulator to the first target enhances the binding of the regulated aptamer to at least the second target and produces a detectable signal.

20. (Withdrawn) The method of claim 19, wherein the at least one second target comprises an imaging agent selected from a group consisting of fluorescent molecule and a radioactive molecule.

21. (Withdrawn) The method of claim 20, wherein the detectable signal is generated by retention of the fluorescent molecule.

22. (Withdrawn) The method of claim 20, wherein the fluorescent molecule is selected from the group consisting of Tc^{99m} and F^{18}.

23. (Withdrawn) The method of claim 22, wherein the first target is a microorganism.

24. (Withdrawn) The method of claim 23, wherein the location of the microorganism is determined by measuring the location of the detectable signal.

25. (Withdrawn) The method of claim 24, wherein the location of the detectable signal is measured by autoradiography or positron emission spectroscopy.

26. (Withdrawn) The method of claim 19, wherein the detectable signal indicates the presence of prostate stem cell antigen.

27. (Withdrawn) The method of claim 26, wherein the detectable signal indicates the presence of prostate specific antigen.

28. (Withdrawn) The method of claim 19, wherein the detectable signal indicates the presence of lipopolysaccharide.

29. (Withdrawn) The method of claim 19, wherein the allosteric regulator and the at least one regulated aptamer are linked in a cis configuration.

30. (Withdrawn) The method of claim 19, wherein the affinity of the allosteric regulator for the first target is higher than the affinity of the regulated aptamer for the second target.

31. (Withdrawn) The method of claim 19, wherein the allosteric regulator comprises a nucleic acid molecule.

32. (Withdrawn) The method of claim 19, wherein the first target is selected from group consisting of prostate specific antigen, a drug, a prodrug, a tumor cell, a microorganism, a receptor, carbohydrate, lipopolysaccharide, and oligosaccharide.

33. (Withdrawn) The method of claim 19, wherein the at least a second target is selected from group consisting of prostate specific antigen, a drug, a prodrug, a tumor cell, a microorganism, a receptor, carbohydrate, lipopolysaccharide, and oligosaccharide.

34. (Withdrawn) The method of claim 32, wherein the prodrug is selected from the group consisting of CPI-0004Na and L-377202.

35. (Withdrawn) The method of claim 32, wherein the prodrug is a peptide-based prodrug.

36. (Withdrawn) The method of claim 32, wherein the oligosaccharide is an O-specific oligosaccharide.

37. (Withdrawn) The method of claim 33, wherein the prodrug is selected from the group consisting of CPI-0004Na and L-377202.

38. (Withdrawn) The method of claim 33, wherein the prodrug is a peptide-based prodrug.

39. (Withdrawn) The method of claim 33, where the oligosaccharide is an O-specific oligosaccharide.

40. (Withdrawn) The method of claim 19, wherein the at least one second target is an imaging agent selected from the group consisting of a fluorescent molecule and a radioactive molecule.

41. (Withdrawn) The method of claim 19, wherein the at least one second target is a toxic agent.

42. (Withdrawn) A method of selectively targeting a drug or prodrug to a target cell, comprising providing an allosteric probe containing an allosteric regulator and a regulated aptamer, contacting the probe with the target cell, wherein the contacting of the allosteric regulator with the target cell enhances the binding of the regulated aptamer to a toxic agent to selectively target the drug or prodrug to the target cell.

43. (Withdrawn) The method of claim 42, where the drug or prodrug inactivates the target cell.

44. (Withdrawn) The method of claim 42, wherein the drug or prodrug is selected from the group consisting of a chemotherapeutic agent, an antibody, and an antisense molecule.

45. (Withdrawn) The method of claim 42, wherein the target cell is a tumor cell.

46. (Withdrawn) The method of claim 42, wherein the allosteric regulator and the at least one regulated aptamer are linked in a cis configuration.

47. (Withdrawn) The method of claim 42, wherein the binding of the allosteric regulator for the target cell has a first affinity and the binding of the regulated aptamer for the second target has a second affinity, and the first affinity is greater than the second affinity.

48. (Withdrawn) The method of claim 42, wherein the allosteric regulator comprises a nucleic acid molecule.

49. (Withdrawn) The method of claim 48, wherein the nucleic acid molecule is selected from the group consisting of an antisense molecule and an aptamer.

50. (Withdrawn) A method of selectively targeting a tumor inhibiting drug to a prostate stem cell antigen expressing cell, comprising, contacting the prostate stem cell antigen expressing cell with an allosteric probe comprising an allosteric regulator capable of binding to the prostate stem cell antigen expressing cell and a regulated aptamer capable of binding to a prodrug which is activated to a drug in the presence of prostate specific antigen, wherein the contacting of the allosteric regulator with the

prostate stem cell antigen expressing cell enhances the binding of the regulated aptamer to prodrug, causes the activation of the prodrug to the drug in the presence of prostate specific antigen, and selectively targets the drug to the prostate stem cell antigen expressing cell.

51. (Withdrawn) The method of claim 50, wherein the prodrug inactivates the prostate stem cell antigen expressing cell.

52. (Withdrawn) The method of claim 50, wherein the prodrug is selected from the group consisting of CPI-0004Na and L-377202.

53. (Withdrawn) A method of selectively targeting an antibiotic to a microorganism susceptible to the antibiotic comprising contacting the microorganism with an allosteric probe comprising an allosteric regulator capable of binding to the microorganism and a regulated aptamer capable of binding to the antibiotic, wherein the contacting of the allosteric regulator with the microorganism enhances the binding of the regulated aptamer to the antibiotic and selectively targets the antibiotic to the microorganism.

54. (Withdrawn) The method of claim 53, wherein the antibiotic inactivates the microorganism.

55. (Withdrawn) The method of claim 53, wherein the antibiotic is selected from the group consisting of neomycin, tobramycin, penicillin, amoxicillin, and streptomycin.